

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

CLAIM 1 (Currently Amended):

2 A program storage medium readable by a computer, tangibly
embodying a software program executable by the computer to perform
4 method steps for specifying a topological map, wherein the topological
map describes the connectivity of nodes on a network, said steps
6 comprising:

8 ~~when~~if a first node is detected on a first port of a first switching device,
wherein both the first node and the first switching device are connected
to the network:
10
12 ~~when~~if a second node was previously detected on the first port,
specifying the topology of a bus segment, wherein the bus
segment comprises the first node, the second node, and the first
14 port interconnected via the bus structure;
16
18 otherwise, ~~when~~if the first node is a second port located on a
second switching device, specifying the topology of a serial
segment, wherein the serial segment comprises the second port
connected to the first port;
20
22 otherwise, specifying the topology of a star segment, wherein
the star segment comprises the first node connected to the first
port.

CLAIM 2 (Original):

2 The program storage medium as recited in claim 1, wherein first and
second nodes are electronic devices.

CLAIM 3 (Original):

2 The program storage medium as recited in claim 1, wherein first and
second switching devices are electronic devices selected from the
group consisting of repeaters, hubs, routers, bridges, and switches.

CLAIM 4 (Original):

2 The program storage medium as recited in claim 1, wherein the star
segment further comprises a third node connected to a third port
located on the first switching device.

CLAIM 5 (Currently Amended):

2 The program storage medium as recited in claim 1, wherein the method
step specifying the topology of the bus segment comprises:

4 ~~when~~if the bus segment is absent, creating the bus segment;

6 ~~when~~if the serial segment exists:

8 transferring the second node and the first port to the bus
segment; and

10 deleting the serial segment;

12 transferring the first node to the bus segment;

14 ~~when~~if previously created star segment comprises the first node prior
16 to transferring the first node to the bus segment and ~~when~~if the
previously created star segment is empty after transferring the first
18 node to the bus segment, deleting the previously created star segment.

CLAIM 6 (Currently Amended):

2 The program storage medium as recited in claim 1, wherein the method
step specifying the topology of the serial segment comprises:

4 ~~when~~if the serial segment is absent, creating the serial segment,
transferring the first node to the serial segment.

CLAIM 7 (Currently Amended):

2 The program storage medium as recited in claim 1, wherein the method
step specifying the topology of the star segment comprises:

4 ~~when~~if the star segment is absent, creating the star segment,
transferring the first node to the star segment.

CLAIM 8 (Currently Amended):

2 A computer operable method for specifying a topological map,
wherein the topological map describes the connectivity of nodes on a
network, comprising the steps of:

4 ~~when~~if a first node is detected on a first port of a first switching device,
6 wherein both the first node and the first switching device are connected
to a network:

8 ~~when~~if a second node was previously detected on the first port,
10 specifying the topology of a bus segment, wherein the bus
segment comprises the first node, the second node, and the first
12 port interconnected via the bus structure;

14 otherwise, ~~whenif~~ the first node is a second port located on a
16 second switching device, specifying the topology of a serial
segment, wherein the serial segment comprises the second port
connected to the first port;
18
otherwise, specifying the topology of a star segment, wherein
20 the star segment comprises the first node connected to the first
port.

CLAIM 9 (Original):

2 The computer operable method as recited in claim 8, providing first
and second nodes are electronic devices.

CLAIM 10 (Original):

2 The computer operable method as recited in claim 8, providing first
and second switching devices are electronic devices selected from the
group consisting of repeaters, hubs, routers, bridges, and switches.

CLAIM 11 (Original):

2 The computer operable method as recited in claim 8, providing the star
segment further comprises a third node connected to a third port
located on the first switching device.

CLAIM 12 (Currently Amended):

2 The computer operable method as recited in claim 8, the method step
specifying the topology of the bus segment comprising:

4 ~~whenif~~ the bus segment is absent, creating the bus segment:

6 ~~whenif~~ the serial segment exists:

8 transferring the second node and the first port to the bus
segment; and

10 deleting the serial segment;

12 transferring the first node to the bus segment;

14 ~~whenif~~ previously created star segment comprises the first node prior
16 to transferring the first node to the bus segment and ~~whenif~~ the
previously created star segment is empty after transferring the first
18 node to the bus segment, deleting the previously created star segment.

CLAIM 13 (Currently Amended):

2 The computer operable method as recited in claim 8, the method step
specifying the topology of the serial segment comprising:

4 ~~whenif~~ the serial segment is absent, creating the serial segment,

transferring the first node to the serial segment.

CLAIM 14 (Currently Amended):

2 The computer operable method as recited in claim 8; the method step
specifying the topology of the star segment comprising:

4 ~~when~~if the star segment is absent, creating the star segment,
transferring the first node to the star segment.

CLAIM 15 (Currently Amended):

2 A topological map for describing the connectivity of nodes on a
network, comprising:

4 at least one map segment, wherein the map segment is,

6 ~~when~~if a first node and a second node are both connected to a
first port on a first switching device, a bus segment wherein the
8 bus segment comprises a map representation of the first node,
the second node, and the first port connected via the bus
10 structure; and

12 otherwise, ~~when~~if the first port on the first switching device is
connected to a second port on a second switching device, a
14 serial segment, wherein the serial segment comprises the map
representation of the first port connected to the second port;

16 otherwise, ~~when~~if the first node is connected to the first port on
18 the first switching device, a star segment, wherein the star
segment comprises the map representation of the first node
20 connected to the first port.

CLAIM 16 (Original):

2 The topological map as recited in claim 15, wherein first and second
nodes are electronic devices.

CLAIM 17 (Original):

2 The topological map as recited in claim 15, wherein first and second
switching devices are electronic devices selected from the group
consisting of repeaters, hubs, routers, bridges, and switches.

CLAIM 18 (Original):

2 The topological map as recited in claim 15, wherein the star segment
further comprises a third node connected to a third port located on the
first switching device.